

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT7686550

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the ASSIGNEE NAMES, BY ADDING ASSIGNEE NOKIA SHANGHAI BELL CO., LTD. previously recorded on Reel 053616 Frame 0392. Assignor(s) hereby confirms the ASSIGNEES ARE: 1) NOKIA SOLUTIONS AND NETWORKS OY AND 2) NOKIA SHANGHAI BELL CO., LTD..
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHENG WANG	08/16/2020
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	NOKIA SOLUTIONS AND NETWORKS OY
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<b>Postal Code:</b>	02610
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<b>City:</b>	SHANGHAI
<b>State/Country:</b>	CHINA
<b>Postal Code:</b>	201206
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16760117
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(704)444-1111
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
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<b>Email:</b>	usptomail@alston.com
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<b>Address Line 2:</b>	101 SOUTH TRYON STREET, SUITE 4000
<b>Address Line 4:</b>	CHARLOTTE, NORTH CAROLINA 28280-4000
<b>ATTORNEY DOCKET NUMBER:</b>	042933/545861
<b>NAME OF SUBMITTER:</b>	TORREY L. WYATT

<b>SIGNATURE:</b>	/Torrey L. Wyatt/
<b>DATE SIGNED:</b>	12/09/2022
<b>Total Attachments: 6</b> source=545861 Corrective Assignment#page1.tif source=545861 Corrective Assignment#page2.tif source=545861 Corrective Assignment#page3.tif source=545861 Corrective Assignment#page4.tif source=545861 Corrective Assignment#page5.tif source=545861 Corrective Assignment#page6.tif	



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**PATENT ASSIGNMENT COVER SHEET**

Electronic Version v1.1

Stylesheet Version v1.2

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHENG WANG	08/16/2020
<b>RECEIVING PARTY DATA</b>	
2. NOKIA SHANGHAI BELL CO., LTD. 388 Ningqiao Road Shanghai, CHINA 201206	
<b>Name:</b> 1.	NOKIA SOLUTIONS AND NETWORKS OY
<b>Street Address:</b>	KARAKAARI 7
<b>City:</b>	ESPOO
<b>State/Country:</b>	FINLAND
<b>Postal Code:</b>	02610
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16760117
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(704)444-1111
<b>Phone:</b>	7044441000
<b>Email:</b>	usptomail@alston.com
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.	

<b>Correspondent Name:</b>	ALSTON & BIRD LLP
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<b>Address Line 2:</b>	SUITE 4000
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<b>ATTORNEY DOCKET NUMBER:</b>	042933/545861
<b>NAME OF SUBMITTER:</b>	GUY R. GOSNELL
<b>Signature:</b>	/Guy R. Gosnell/
<b>Date:</b>	08/27/2020
<b>Total Attachments: 3</b> source=545861_Assignment#page1.tif source=545861_Assignment#page2.tif source=545861_Assignment#page3.tif	
<b>RECEIPT INFORMATION</b>  <b>EPAS ID:</b> PAT6271010 <b>Receipt Date:</b> 08/27/2020	

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**ASSIGNMENT - WORLDWIDE**

ASSIGNOR(S)

<b>Name</b>	<b>City</b>	<b>Country</b>
Cheng Wang	Shanghai	China

(Full legal name, city and country of each inventor)

ASSIGNEE

**Nokia Shanghai Bell Co., Ltd.**

388 Ningqiao Road, Shanghai, 201206, People's Republic of China

**NOKIA SOLUTIONS AND NETWORKS OY**

Karakaari 7, 02610 Espoo, Finland

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the ASSIGNOR(S) agree to assign and hereby assign, sell, transfer and set over to the ASSIGNEE and its successors, assigns and legal representatives, the entire right, title and interest, for United States of America and for all other countries in and to (1) the invention(s) identified by the following title or application number and filing date, and (2) any and all related inventions ("RELATED INVENTIONS" as defined below).

**Application Title: A METHOD, APPARATUS AND SYSTEM FOR REAL-TIME  
VIRTUAL NETWORK FUNCTION ORCHESTRATION**

**Application number: WO PCT/CN2017/108653****Filing date: 2017-10-31**  
(YYYY-MM-DD)

I/we, the ASSIGNOR(S), hereby authorize and request a representative of the ASSIGNEE to insert the application title, application number and filing date when known/received, after the execution of this document. The ASSIGNOR(S) hereby acknowledge and agree that the ASSIGNEE shall have the right to claim priority, directly or through another patent application, to the application identified above in any and all related patent applications subsequently filed in all jurisdictions.

I/we the ASSIGNOR(S) hereby acknowledge and agree that RELATED INVENTIONS include all national, regional and international patent applications filed and to be filed in any and all jurisdictions, that claim priority to the invention(s) identified by the above title or application number and filing date, said patent applications include all divisionals, continuations, re-issues, re-examinations, and continuations-in-part applications, and RELATED INVENTIONS include all rights and privileges in said patent applications and under any and all letters patent that may be granted in the United States of America and in all other countries resulting from said patent applications.

The ASSIGNOR(S) authorize the ASSIGNEE to make applications for such protection in its own name and maintain such protection in any and all countries including the United States of America, and to invoke and claim for any application for patent or other form of protection for said invention(s),

without further authorization from us, any and all benefits, including the rights of priority provided by any and all treaties, conventions, or agreements.

The ASSIGNOR(S) hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of the ASSIGNEE to apply for patent or other form of protection for said invention(s) and to claim the aforesaid benefit of the right of priority.

The ASSIGNOR(S) request that any and all patents for said invention(s) be issued to the ASSIGNEE, its/their successors, assigns and legal representatives, in the United States of America and in all other countries, or to such nominees as the ASSIGNEE may designate.

The ASSIGNOR(S) agree that, when requested, we shall, without charge to the ASSIGNEE sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

The ASSIGNOR(S) and ASSIGNEE agree that this assignment may be executed by either handwritten signatures, including the exchange of scanned representations of handwritten signatures, or e-signatures. By using e-signature to sign this assignment, the ASSIGNOR(S) and ASSIGNEE acknowledge that execution in this manner creates a binding contract between the ASSIGNOR(S) and ASSIGNEE.

Each inventor/assignor please sign and date below:

Inventor (First Middle Last)

Signature

Date

Cheng Wang

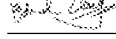
Cheng Wang  
Cheng Wang (Aug 16, 2020 14:17:18)

Aug 16, 2020

The ASSIGNEE accepts this assignment:

**Nokia Shanghai Bell Co., Ltd**

Name: Edward ZHANG


Signature 

Title: EDGM-Strategy & Innovation  
of Nokia Shanghai Bell Co., Ltd.

Date Aug 19, 2020

**NOKIA SOLUTIONS AND NETWORKS OY**

Name: Anna Haipola

Signature   
Anna Haipola Aug 13, 2020 13:00:00

Title: Authorized Signatory

Date Aug 13, 2020

Name: Per Möller

Signature   
Per Möller Aug 13, 2020 13:00:00

Title: Authorized Signatory

Date Aug 13, 2020